

3. (Amended) The pneumatic tire according to claim 1, wherein a ratio of the height of said protrusion to a groove depth of the main groove is set at 0.8 or higher.

REMARKS

Claims 1-6 are pending in the application. By this Amendment, claims 1 and 3 are amended.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph. The claims are amended to obviate the rejection. Withdrawal of the rejection is respectfully requested.

Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as unpatentable over the admitted prior art in view of Kukimoto et al. (U.S. Patent No. 5,445,201). The rejection is respectfully traversed.

The Office Action asserts that the admitted prior art shows a pneumatic tire having ribbed treads with circumferential grooves having widths that narrow during inflation. The Office Action also asserts that the admitted prior art shows groove walls of a main groove being inclined at 80 degrees with respect to the tread. The Office Action admits that a protrusion is not provided at the groove bottom.

Kukimoto shows a pneumatic tire with a tread having circumferential main grooves with groove walls outwardly inclined and a ribbed shaped protrusion located in the groove with reference made to Figure 22b. Additionally, a protrusion located in the groove is also shown in Figures 17a, 17b, 20b and 21.

Claim 1 is directed to a pneumatic tire provided with a plurality of main grooves extended in a tire circumferential direction on a tread surface. Claim 1 recites that, with regard to a main groove having a groove width narrowed during inflation among the plurality of main grooves, both groove walls are inclined so that the groove width of the main groove becomes wider toward a groove bottom of the main groove and a protrusion dividing a groove space of the main groove in a tire width direction is provided at the groove bottom. Further, claim 1 recites that the protrusion has a pair of side walls and respective ones of the pair of side walls and the both groove walls are oriented parallel to each other as viewed in cross-section.

It is respectfully submitted that the applied art, alone or in combination, fails to teach or suggest the features of claim 1. Specifically, it is respectfully submitted that the applied art fails to teach or suggest a protrusion dividing a groove space in a tire width direction provided at the groove bottom and the protrusion has a pair of side walls and respective ones of the pair of side walls and both groove walls are oriented parallel to each other as viewed in cross-section. Thus, one of ordinary skill in the art would not be motivated to combine the teachings of the applied art because such combination would not result in the claimed invention.

Furthermore, one of ordinary skill in the art would appreciate that, when the claimed structure is adopted to or for the main groove the (groove) width of which undergoes narrowing at the time of inflation of the tire, it is possible to effectively suppress generation of uneven wear otherwise likely in the vicinity of or about the main groove.

As a result, for at least the reasons discussed above, claim 1 is allowable over the applied art.

Claims 2, 3 and 6 depend from claim 1 and include all of the features of claim 1. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reason claim 1 is allowable as well as for the features they recite.

Withdrawal of the rejection is respectfully requested.

Claim 4 is rejected under 35 U.S.C. 103(a) as unpatentable over the admitted prior art in view of Kukimoto and further in view of Japan 4-274906 and/or Constantakis et al. (U.S. Patent No. 2,708,957). The rejection is respectfully traversed.

Claim 4 depends from claim 1 and includes all of the features of claim 1. Thus, claim 4 is allowable at least for the reason claim 1 is allowable as well as for the features it recites.

Withdrawal of the rejection is respectfully requested.

Claim 5 is rejected under 35 U.S.C. 103(a) as unpatentable over the admitted prior art in view of Kukimoto and further in view of Overman (U.S. Patent No. 2,254,622). The rejection is respectfully traversed.

Claim 5 depends from claim 1 and includes all of the features of claim 1. Thus, claim 5 is allowable at least for the reason claim 1 is allowable as well as for the features it recites.

Withdrawal of the rejection is respectfully requested.

In view of the foregoing, reconsideration of the application and allowance of the pending claims are respectfully requested. Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

Should additional fees be necessary in connection with the filing of this paper or if a Petition for Extension of Time is required for timely acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No. 18-0013 for any such fees and Applicant(s) hereby petition for such extension of time.

Respectfully submitted,

Dated: February 20, 2003

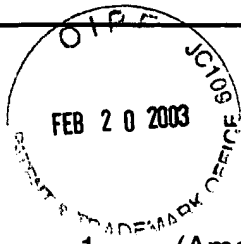
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Enclosure(s): Appendix I (Marked-Up Version of Amended Claims)

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APPENDIX I

MARKED-UP VERSION OF AMENDED CLAIMS

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1. (Amended) A pneumatic tire provided with a plurality of main grooves extended in a tire circumferential direction on a tread surface, wherein, with regard to a main groove having a groove width narrowed during inflation among said plurality of main grooves, both groove walls are inclined so that the groove width of the main groove becomes wider toward the a groove bottom of the main groove, and a protrusion dividing ~~the a~~ groove space of the main groove in ~~the a~~ a tire width direction is provided at the groove bottom, the protrusion having a pair of side walls and respective ones of the pair of side walls and the both groove walls being oriented parallel to each other as viewed in cross-section.

3. (Amended) The pneumatic tire according to claim 1, wherein a ratio of the height of said protrusion to ~~the a~~ groove depth of the main groove is set at 0.8 or higher.